UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

NOV 07 2017

Mr. Ron Gore
Chief
Alabama Department of Environmental
Management, Air Division
1400 Coliseum Boulevard
Montgomery, Alabama 36130

Dear Mr. Gore:

Thank you for submitting the state of Alabama's 2017 Ambient Air Monitoring Network Plan (Network Plan) dated July 10, 2017. The Network Plan is required by 40 Code of Federal Regulations (CFR) §58.10.

The U.S. Environmental Protection Agency understands that the Alabama Department of Environmental Management (ADEM) provided the public a 30-day review and comment period for the Network Plan. Thank you for including all public comments received and your response to comments. The EPA has reviewed the Network Plan and the public comments provided by the ADEM.

With this letter, the EPA approves the ADEM's Network Plan with the exception of the request by the Jefferson County Department of Health (JCDH) to shut down its ozone site in Hoover (Air Quality System ID 01-073-2006). No rationale for the shutdown was included in the Network Plan. We continue to work with the JCDH on this portion of the Network Plan. Enclosed with this letter are notes on our review of the Network Plan as well as suggestions for next year's plan.

Finally, the EPA would like to continue discussions with the ADEM about additional PM_{10} monitoring in the communities near the Port of Mobile coal terminal that was requested by several commenters.

Thank you for your work with us to monitor air pollution and promote healthy air quality in Alabama. If you have any questions or concerns, please contact Gregg Worley at (404) 562-9141 or Darren Palmer at (404) 562-9052.

Sincerely,

Beverly H. Banister

Beverly H. Banister
Director
Air, Pesticides and Toxics Management Division

Enclosure

cc: Mr. Jonathan Stanton, Director JCDH
Mr. Scott Cardno, Director HDNR

2017 State of Alabama Ambient Air Monitoring Network Plan
U.S. EPA Region 4 Comments and Recommendations

This document contains the U.S. Environmental Protection Agency Region 4 comments and recommendations on the state of Alabama's 2017 ambient air monitoring network plan (Network Plan). Ambient air monitoring rules, which include regulatory requirements that address network plans, data certification, and minimum monitoring requirements, among other requirements, are found in 40 CFR Part 58. Minimum monitoring requirements for criteria pollutants are listed in 40 CFR Part 58, Appendix D. Minimum monitoring requirements are listed for ozone (O_3), particulate matter less than 2.5 microns ($PM_{2.5}$), particulate matter less than 10 microns (PM_{10}), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), carbon monoxide (CO), and lead (Pb).

The minimum monitoring requirements are based on core based statistical area (CBSA) boundaries, as defined by the U.S. Office of Management and Budget's (OMB) July 1, 2016, population estimates from the U.S. Census Bureau, and historical ambient air monitoring data. Minimum monitoring requirements for O_3, $PM_{2.5}$, and PM_{10}, only apply to metropolitan statistical areas (MSAs), which are a subset of CBSAs containing urban core populations of 50,000or more. OMB currently defines 13 MSAs in the state of Alabama. These MSAs and the respective July 1, 2016, population estimates from the U.S. Census Bureau are shown in Table 1.

Table 1: Metropolitan Statistical Areas and July 1, 2016 Population Estimates

MSA Name	Population
Anniston-Oxford-Jacksonville, AL	114,611
Auburn-Opelika, AL	158,991
Birmingham-Hoover, AL	1,147,417
Columbus, GA-AL	308,755
Daphne-Fairhope-Foley, AL	208,563
Decatur, AL	152,256
Dothan, AL	147,834
Florence-Muscle Shoals, AL	146,534
Gadsden, AL	102,564
Huntsville, AL	449,720
Mobile, AL	414,836
Montgomery, AL	373,922
Tuscaloosa, AL	241,378

Proposed Monitoring Network Changes

There are three primary quality assurance organizations (PQAO) in the state of Alabama with the responsibility of maintaining an adequate ambient air monitoring network: The Alabama Department of Environmental Management (ADEM), the Jefferson County Department of Health (JCDH), and the Huntsville Department of Natural Resources and Environmental Management (HDNREM).

In its review of last year's Network Plan, the EPA determined that the HDNREM needed to install a collocated PM_{10} sampler and report the data to EPA's Air Quality System (AQS) in order to meet the quality assurance requirements for manual methods found in 40 CFR Part 58, Appendix A, Section 3.3.4. The HDNREM subsequently installed a collocated sampler and is now meeting the PM_{10} regulatory requirement at the Old Airport Road site (AQS ID 01-089-0014).

In the response to the ADEM's 2016 and 2017 Network Plans and the 2016 Network Plan Addendum dated April 7, 2017, the EPA approved several changes to the state of Alabama's monitoring network that have since been implemented. These changes are summarized in Table 2 below.

Agency	AQS Site ID	Pollutant	Monitor Type[1]	Action Taken
ADEM	01-051-1001	O_3	SLAMS	Relocated. New AQS ID: 01-051-1003
	01-051-1003	O_3	SLAMS	Startup. Approved 06/05/2017.
	01-113-0001	$PM_{2.5}$, PM_{10}	SLAMS	Relocated. New AQS ID: 01-113-0003
	01-113-0002	O_3	SLAMS	To be relocated at the end of the 2017 O_3 season. New AQS ID: 01-113-0003
	01-113-0003	$PM_{2.5}$, PM_{10}, O_3	SLAMS	Startup. Approved 06/05/2017. O_3 approved to startup March 1, 2018.
	01-117-9001	SO_2 DRR	SLAMS	Startup.
JCDH	01-073-6002	PM_{10}	SLAMS	Discontinued Low Volume PM_{10}
	01-073-6004	PM_{10}	SLAMS	Discontinued Low Volume PM_{10}
	01-073-1003	PM_{10}	SLAMS	Discontinued Low Volume PM_{10}
	01-073-1005	PM_{10}	SLAMS	Discontinued Low Volume PM_{10}
	01-073-6004	SO_2	SPM	Change Monitor Type from SLAMS to SPM
	01-073-0023	Pb	SLAMS	Discontinued Pb sampling effective 6/30/2016.

[1] SLAMS = State and Local Air Monitoring Station, SPM = Special Purpose Monitor

In early 2016, the ADEM relocated the Phenix City $PM_{2.5}$ site (AQS ID 01-113-0001) to a nearby location due to loss of site access. The EPA and the ADEM agreed on the new location (AQS ID 01-113-0001) and the information was made available for public comment, which closed on March 10, 2016. No comments were received. Subsequently, the property owner of the new location raised the lease fee and the ADEM lost access to the property. The ADEM then proposed to establish a single multipollutant site monitoring both O_3 and $PM_{2.5}$ in Phenix City. The EPA approved the South Gerard Middle School site (AQS ID 01-113-0003) on June 5, 2017. The ADEM will continue monitoring O_3 at the current site (AQS ID 01-113-0002) through the end of the 2017 O_3 season, October 31, 2017. The monitor will be relocated to the new site and fully operational by March 1, 2018.

In response to last year's plan, the EPA noted that the Shuttlesworth site (AQS ID 01-073-6004) is the PM_{10} maximum concentration site for the Birmingham area and requested that the JCDH change the monitoring objective in AQS to reflect this finding. This change has not yet been made. The EPA once again requests that the JCDH change the monitoring objective to "highest concentration" or provide rationale as to why the monitor should not be characterized as "highest concentration" in AQS. The EPA asks that the JCDH act on this no later than December 31, 2017. As stated in our June 5, 2017 response to the network plan addendum dated April 7, 2017, this monitor must remain classified as a SLAMS as previously classified in subsequent Network Plans submitted since 2007. While correctly classified in AQS as SLAMS, it is incorrectly classified in the 2017 Network Plan as a SPM.

The EPA appreciates that the JCDH reports both continuous PM_{10} and $PM_{2.5}$ measurements from its Shuttlesworth site to the EPA's AirNow system. While the $PM_{2.5}$ measurements are made utilizing a non-regulatory method, the data are useful in informing the EPA, the JCDH, and the local community about the general levels of $PM_{2.5}$ in the immediate vicinity of the ERP Compliant Coke facility (formerly Walter Energy).

Proposed monitoring network changes for 2017 are found on Pages 7-8 of the Network Plan (see Table 3). No changes were proposed to the HDNREM's air monitoring network.

Table 3: Proposed Changes in the 2017 Network Plan

Agency	AQS Site ID	Pollutant	Monitor Type	Action Taken	EPA Comments
ADEM	01-121-0002	PM2.5	SLAMS	Shutdown	Approved. Please include rationale for any changes in future Network Plans.
	01-119-0003	SO_2	SPM	Startup	Existing O_3 site. Background SO_2 monitoring. Approved.
	01-113-0002	O_3	SLAMS	Shutdown at the end of 2017	Approved to start up at new location (01-113-0003) at the beginning of the 2018 O_3 season.
	01-113-0003	O_3, $PM_{2.5}$	SLAMS	Site Consolidation	Approved. Consolidating sites 01-113-0001 and 0002.
JCDH	01-073-2003	PM_{10}	SLAMS	Discontinue manual PM_{10} sampling.	Approved, effective immediately. Continuous PM_{10} sampling will remain.
	01-073-2006	O_3, $PM_{2.5}$ TEOM	SLAMS	Shutdown	Not approved. No rationale provided for shutting down the site. For further consideration, please provide the rationale by December 31, 2017.

In addition to the changes identified in Table 3, and since the Network Plan was submitted, the HDNREM has informed the EPA that it will have to move the Old Airport Road site (AQS ID 01-089-0014) about 1,000 feet due to development of the area by the Parks and Recreation Department. EPA staff have visited the site and support the relocation. If the HDNREM plans to relocate the site prior to submitting it's 2018 Network Plan, it will need to submit a Network Plan addendum to the EPA for approval. A 30-day public comment period is required before final submission to EPA.

The ADEM requested to shut down the Childersburg $PM_{2.5}$ site (AQS ID 01-121-0002) in the Network Plan; however, no rationale or analysis was provided to justify the shutdown. In ADEM's response to public comments by the Southern Environmental Law Center (SELC) regarding this proposed change, the rationale provided for terminating the site is the type of information that should be included in future network plans when requesting these types of changes. The EPA is approving this request based on the rationale provided in ADEM's response to comments.

In JCDH's response to both Gasp and the SELC regarding the discontinuation of PM_{10} sampling at the Wylam site (AQS ID 01-073-2003), it stated that only the manual samplers are being discontinued upon EPA's request. This is correct. These samplers will be utilized for an air toxics study in the near future. Regulatory continuous PM_{10} sampling will continue at the Wylam site. There is no EPA requirement for an agency to maintain both manual and continuous PM_{10} sampling at a given site. The JCDH must change the monitor type classification of the PM_{10} continuous sampler at the Wylam site from SPM to SLAMS. We appreciate that the JCDH continually assesses its ambient air monitoring network and works with the EPA to modify it when needed. However, with respect to the request to terminate the Hoover site (AQS ID 01-073-2006), no discussion was included in the Network Plan or in response to public comments justifying this request. In order for the EPA to act on the request prior to the beginning of next ozone season, the EPA requests that the JCDH submit an addendum to the Network Plan by December 31, 2017. The Network Plan addendum needs to be made available for public inspection and comment for at least 30 days prior to submission to the EPA, as required by 40 CFR §58.10(a)(1).

Lastly, in response to comments submitted by Gasp requesting more information for all monitors in the state, including historical $PM_{2.5}$ speciation data, the EPA has developed and maintains the Air Data website at https://www.epa.gov/outdoor-air-quality-data where anyone with internet access can find this information, including data analysis and visualization tools. The ADEM may want to provide the public this internet address in future network plans. The EPA agrees with the commenter that inclusion of a map of all monitoring sites in the state would be a useful resource to readers.

Air Quality Index (AQI) Reporting
40 CFR §58.50

AQI reporting is required for MSAs with populations over 350,000. Four MSAs in Alabama are required to report an AQI: Birmingham, Huntsville, Mobile, and Montgomery. The state's Network Plan on Page 6 contains links to the ADEM, the JCDH and the HDNREM web sites where this information can be obtained. This satisfies the AQI reporting requirement for the state.

The EPA recommends that the HDNREM report data from the continuous sampler operated at the Old Airport Road site (AQS ID 01-089-0014) to parameter code 88502 effective January 1, 2018. Presently, the data are being reported to AQS parameter code 88501. The data from this sampler should be reported to parameter code 88502 because they are used to inform the AQI for the area. $PM_{2.5}$ continuous data reported to 88501 are not being used for any meaningful purpose (e.g., NAAQS and/or AQI). While 88501 is intended to provide a home for data not used for these other data uses, there is little value in continuing to operate instruments that are not at least used for AQI. The EPA recognizes that there are valid reasons for agencies reporting these data to 88501 (e.g., a new continuous method at the site is being evaluated) and we will schedule a call to discuss them. Please contact us if you have any questions about reporting these data.

National Core (NCore) Monitoring Network
40 CFR Part 58, Appendix D, Section 3.0

The state is required to have one NCore site. The NCore site must measure, at a minimum, $PM_{2.5}$ particle mass using continuous and integrated/filter-based samplers, speciated $PM_{2.5}$, $PM_{10-2.5}$ particle mass, O_3, SO_2, CO, NO/NOy, wind speed, wind direction, relative humidity, and ambient temperature. The North Birmingham site (AQS ID 01-073-0023) was approved as the state's NCore site by the EPA's Office of Air Quality Planning and Standards (OAQPS) on October 30, 2009, and it meets all requirements for the state.

O_3 Monitoring Requirements
40 CFR Part 58, Appendix D, Section 4.1 and Table D-2

The EPA determined that the O_3 monitoring network outlined in the Network Plan meets the minimum requirements found in 40 CFR Part 58, Appendix D, Section 4.1 and Table D-2 for all MSAs. Previously, the EPA approved the relocations of the Dewberry Trail O_3 site (AQS ID 01-051-1001) to 206 Queen Ann Road (AQS ID 01-051-1002) and the Phenix City-Ladonia O_3 site (AQS ID 01-113-0002) to the new site at South Gerard School (AQS ID 01-113-0003). The relocation to the South Gerard School is to occur in time for the 2018 O_3 season which starts March 1, 2018.

As mentioned earlier, the JCDH requested to shut down its Hoover site (AQS ID 01-073-2006) at the end of the 2017 O_3 season and relocate the shelter to its existing Corner School site (01-073-5003). No rationale was provided for the move by the JCDH. Additional justification is required before final EPA

approval can be granted. Please submit additional justification to the EPA in an addendum to the Network Plan by December 31, 2017.

CO Monitoring Requirements
40 CFR, Part 58, Appendix D, Sections 3.0(b) and 4.2

Ambient air monitoring network design criteria for CO are found in 40 CFR Part 58, Appendix D, Sections 3.0(b) and 4.2. This section requires CBSAs with populations over one million to operate one CO monitor collocated with a near-road monitor. This requirement is met for the Birmingham CBSA by the CO monitor at the Arkadelphia near-road site (AQS ID 01-073-2059). CO monitoring is also required for the NCore network as listed in Section 3.0(b). The CO monitor located at the Birmingham NCore site (AQS ID 01-073-0023) meets this requirement. In summary, the CO monitoring network outlined in the Network Plan meets the minimum requirements for all CBSAs.

NO_2 Monitoring Requirements
40 CFR Part 58, Appendix D, Section 4.3

Three types of NO_2 monitoring are required: near-road, area-wide, and Regional Administrator. These are described in 40 CFR Part 58, Appendix D, Sections 4.3.2, 4.3.3, and 4.4.4, respectively.

The Birmingham area is the only CBSA required to have a near-road NO_2 monitoring station in Alabama. The JCDH operates a NO_2 monitor at the Arkadelphia near-road site (AQS ID 01-073-2059) to meet this requirement. The Arkadelphia near-road monitoring site was approved in the EPA's response to Alabama's 2013 Network Plan. The EPA's Phase 3 regulatory requirements found in 40 CFR Part 58, Appendix D, Section 4.3.2 included the establishment of one NO_2 near-road site in CBSAs with populations between 500,000 and 1 million by January 1, 2017. The EPA published a final rule that removed this Phase 3 NO_2 monitoring requirement which became effective on December 30, 2016 (81 FR 96381). No other CBSA in Alabama is required to conduct near-road monitoring.

The Birmingham area is the only CBSA in Alabama required to have an area-wide NO_2 monitoring site. The JCDH operates a NO_2 monitor at the North Birmingham NCore site (AQS ID 01-073-0023) to meet this requirement.

The EPA has not identified a monitor in Alabama that is needed to meet the Regional Administrator NO_2 monitoring requirement. There is no requirement for ADEM to meet. The full list of NO_2 monitors identified by the Regional Administrators can be found on the EPA's website at: http://www.epa.gov/ttnamti1/svpop.html.

All of the NO_2 monitoring requirements are being met in the Birmingham CBSA and no other CBSA in Alabama is required to monitor for NO_2 at this time.

SO_2 Monitoring Requirements
40 CFR Part 58, Appendix D, Section 4.4

Ambient air monitoring network design criteria for SO_2 are found in 40 CFR Part 58, Appendix D, Section 4.4. This section requires that "[t]he population weighted emissions index (PWEI) shall be calculated by states for each core based statistical area (CBSA)." As a result, the SO_2 monitoring sites required in each CBSA will satisfy minimum monitoring requirements if the monitors are sited within the boundaries of the parent CBSA and are of the following site types: population exposure, maximum

concentration, source-oriented, general background, or regional transport. An SO_2 monitor at a NCore station may satisfy minimum monitoring requirements if that monitor is located within a CBSA with minimally required monitors consistent with Appendix D, Section 4.4. At this time, the Birmingham and Mobile CBSAs are required to have two and one SO_2 monitors, respectively. The SO_2 monitoring network design outlined in the Network Plan meets the minimum requirements by operating the following monitors in Table 4.

Table 4: SO_2 PWEI Monitors

CBSA	COUNTY	SITE NAME	SITE ID
Birmingham	Jefferson	North Birmingham	01-073-0023
	Jefferson	Fairfield	01-073-1003
Mobile	Mobile	Chickasaw	01-097-0003

The EPA's SO_2 Data Requirements Rule (DRR) (see 80 *Federal Register*, No. 162, August, 21, 2015) requires characterization of the air quality near sources with SO_2 emissions greater than 2,000 tons per year (tpy) by conducting ambient air monitoring or modeling. On July 1, 2016, the ADEM submitted a final list of sources in the state around which SO_2 air quality must be characterized. Only the L'hoist North America – Montevallo Plant will be characterized using monitoring. The remaining sources were characterized using modeling and/or took federally enforceable emissions limits.

The EPA approved the location of the SO_2 DRR site (AQS ID 01-117-9001) to characterize the maximum ambient 1-hour SO_2 concentrations near the L'hoist North America – Montevallo Plant in last year's response to the Network Plan and it became operational by January 1, 2017.

The EPA, the ADEM, and the JCDH agreed that the JCDH will install an SO_2 monitor at the existing Shuttlesworth site (AQS ID 01-073-6004) in order to determine whether SO_2 concentrations near the coke plants are higher than those measured at the North Birmingham NCore site (AQS ID 01-073-0023). This monitor was installed and operational on January 1, 2017. The EPA, in conjunction with the ADEM and the JCDH, will evaluate the SO_2 data after all data collected during calendar year 2017 have been entered into AQS. If the SO_2 concentrations at Shuttlesworth are higher than at North Birmingham, then additional characterization of the SO_2 concentrations in the area may be required. However, if the monitored concentrations at Shuttlesworth are lower than those at North Birmingham, then the ADEM and the JCDH may request approval to discontinue the SO_2 monitor at Shuttlesworth.

At this time, the SO_2 monitoring network described in the state's Network Plan meets all of the design criteria of 40 CFR Part 58.

Pb Monitoring Requirements
40 CFR Part 58, Appendix D, Section 4.5

Forty (40) CFR Part 58, Appendix D, Section 4.5 requires that "[a]t a minimum, there must be one source-oriented SLAMS [State and Local Air Monitoring Station] site located to measure the maximum Pb concentration in ambient air resulting from each non-airport Pb source which emits 0.50 or more tons per year and from each airport which emits 1.0 or more tons per year..." Monitoring is ongoing as required near the Sanders Lead Company in Troy, Alabama (AQS ID 01-109-0003).

In its 2016 Network Plan response, the EPA identified one deficiency in the Pb source monitoring network. Based on the most current emissions data available at the time of our response, the 2011 national emissions inventory (NEI), the Anniston Army Depot emits 1.79 tpy of Pb, which is greater than the 0.50 tpy monitoring trigger. Pb source monitoring waivers are required by 40 CFR Part 58,

Appendix D, Section 4.5 and are to be renewed in each 5-year network assessment. There was no discussion in the 2016 Network Plan regarding whether monitoring is appropriate at this facility or whether the state is requesting a waiver of monitoring requirements. In a letter dated November 18, 2016, the ADEM provided updated emission inventory data showing the source's Pb emissions have been below 0.50 tpy since 2012. After reviewing this information, the EPA agrees that no monitoring is required near the facility.

On March 28, 2016, the EPA published changes in the ambient air monitoring rules for the NCore network design and removed the requirement to measure Pb at NCore sites in areas with populations over 500,000 (81 FR 17248). This requirement was eliminated due to the low concentrations that were measured at the NCore sites nationwide. This rule became effective on April 27, 2016. The JCDH stopped all Pb monitoring efforts effective June 30, 2016, at the North Birmingham NCore site (AQS ID 01-073-0023). The EPA approved this action in our response to the 2016 Network Plan.

The Pb monitoring network described in the state's Network Plan meets all of the design criteria of 40 CFR Part 58.

PM_{10} Monitoring Requirements
40 CFR Part 58, Appendix A, 3.3
40 CFR Part 58, Appendix D, Section 4.6 and Table D-4

Region 4 has determined that the PM_{10} monitoring network described on Pages 20-21 of the Network Plan meets or exceeds the minimum requirements found in 40 CFR Part 58, Appendix D, Table D-4 for all MSAs. The collocation requirements for manual PM_{10} monitors are also being met for all areas. Collocation requirements apply to each PQAO and are based on the manual sampling methods employed.

As previously discussed above, the JCDH must change the monitor type classification for the continuous PM_{10} sampler at its Wylam site (AQS ID 01-073-2003) from SPM to SLAMS, as EPA is approving the discontinuation of the collocated manual PM_{10} samplers.

Several public comments were submitted regarding PM_{10} monitoring in Mobile, AL. Specifically, the commenters have requested PM_{10} monitoring be conducted closer to the population and industrial centers of Mobile due to concerns about fugitive dust emissions from coal loading and unloading activities at the Port of Mobile. The EPA would like to continue discussions with the ADEM on additional PM_{10} monitoring efforts in the communities near these activities. Monitoring had previously been conducted in other areas of Mobile and at the fenceline of the coal terminals, but not in the communities closest to the largest sources of coal dust emissions.

$PM_{2.5}$ Monitoring Requirements
40 CFR Part 58, Appendix A, 3.2.3
40 CFR Part 58, Appendix D, Section 4.7 and Table D-5

The EPA has determined that the $PM_{2.5}$ monitoring network described on Pages 26-30 of the Network Plan meets or exceeds the minimum requirements found in 40 CFR Part 58, Appendix D, Table D-5 for all MSAs. The $PM_{2.5}$ collocation requirement found in 40 CFR Part 58, Appendix A, 3.2.3.2 for manual reference and equivalent methods collocated $PM_{2.5}$ monitoring is also being met for all three agencies. Collocation requirements apply to each PQAO and are based on the sampling methods employed.

$PM_{2.5}$ Near-road Monitoring Requirement
40 CFR Part 58, Appendix D, Section 4.7.1(b)(2)

Regulatory requirements in 40 CFR Part 58, Appendix D, Section 4.7.1(b)(2) require that in CBSAs with populations of 1,000,000 or more persons, at least one $PM_{2.5}$ monitor, is to be collocated at a near-road NO_2 station. The $PM_{2.5}$ monitor at the Arkadelphia near-road site (AQS ID 01-073-2059) in Birmingham fulfills this requirement.

$PM_{2.5}$ Continuous Monitoring Requirements
40 CFR Part 58, Appendix D, Section 4.7.2

Regulatory provisions for continuous $PM_{2.5}$ monitoring require that "[t]he state, or where appropriate, local agencies must operate continuous $PM_{2.5}$ analyzers equal to at least one-half (round up) the minimum required sites listed in Table D-5 of this appendix. At least one required continuous analyzer in each MSA must be collocated with one of the required FRM, Federal Equivalent Method (FEM), Approved Regional Method (ARM) monitors, unless at least one of the required FRM/FEM/ARM monitors is itself a continuous FEM or ARM monitor in which case no collocation requirement applies." Based on the information provided in the Network Plan, the EPA has determined that the $PM_{2.5}$ continuous monitoring network meets or exceeds the minimum monitoring requirements in all of the MSAs in the state.

As discussed in the Air Quality Index (AQI) Reporting section of this document, the data from the continuous $PM_{2.5}$ sampler operated by the HDNREM should be reported to parameter code 88502 effective January 1, 2018.

The most recent technical systems audit conducted on the ADEM's Air Monitoring Program found that ADEM has modified the inlets of all but one of its FEM $PM_{2.5}$ monitors. As a result, the data collected by these monitors do not meet FEM criteria and cannot be used for regulatory decision making. The EPA recommends that the ADEM compare collocated FRM and FEM data to determine whether the data satisfy the regulatory Class III FEM comparability criteria (40 CFR §58.11(e)). This action would allow the ADEM to request exclusion of the FEM data from comparisons to the NAAQS if the collocated FRM and FEM data do not satisfy the regulatory Class III FEM comparability criteria. The EPA discourages agencies from modifying equipment in the manner that the ADEM has, because it likely reduces the quality of the data collected. The EPA requests that the ADEM operate these monitors so that they meet the FEM method requirements beginning January 1, 2018. After collecting two years of collocated FRM and FEM data, the ADEM may request exclusion of the data from NAAQS comparisons. If the collocated data do not demonstrate sufficient comparability using the process described in §58.11(e), the ADEM may request the exclusion via the Network Plan process.

$PM_{2.5}$ Background and Transport Sites
40 CFR Part 58, Appendix D, Section 4.7.3

Forty (40) CFR Part 58, Appendix D, Section 4.7.3 requires that "[e]ach state shall install and operate at least one $PM_{2.5}$ site to monitor for regional background levels and at least one $PM_{2.5}$ site to monitor for regional transport." The 2017 Network Plan identifies the Crossville site (AQS ID 01-049-1003) in Dekalb County as a rural background site and the Ashland site (AQS ID 01-027-0001) in Clay County as a regional transport site. Regulatory FRM monitors are operated at both sites. The ADEM has satisfied the requirements for regional background and transport sites.

$PM_{2.5}$ Chemical Speciation Network (CSN)
40 CFR Part 58, Appendix D, Section 4.7.4

In 2015, the EPA conducted an assessment of the CSN in an effort to optimize the network and make it sustainable moving forward. As a result of this assessment, the EPA defunded a number of monitoring sites, eliminated CSN $PM_{2.5}$ mass measurements, reduced the frequency of carbon blanks, reduced sample frequency at some monitoring sites, and reduced the number of icepacks in shipments during cooler months of the year. As noted in the Network Plan, the following CSN monitors at two sites in Alabama were defunded and have been shut down: The Huntsville Old Airport site (AQS ID 01-089-0014) and the Montgomery MOMS site (AQS ID 01-101-1002). The remaining sites in Birmingham (AQS ID 01-073-0023 and 01-073-2003) and Phenix City (AQS ID 01-113-0001), fulfill the CSN requirements.

Photochemical Assessment Monitoring Station (PAMS)
40 CFR Part 58, Appendix D, Section 5.0

With the promulgation of a new O_3 NAAQS on October 1, 2015, the EPA also finalized changes to the PAMS program. By June 1, 2019, PAMS monitoring will be required at the NCore site. While the EPA recognizes there are several implementation challenges to work through, we will work closely with the ADEM and the JCDH to minimize the burden of implementing this new monitoring program. At this time, however, there is no other PAMS requirement for the state of Alabama.

Other Comments

On Pages 44, 48, and 50, the Network Plan indicates that the air quality agencies in Alabama are meeting all of the requirements for ambient air quality surveillance in 40 CFR Part 58. A subset of those requirements are the monitor siting requirements. We appreciate that the agencies included the site assessment information in Appendix C of the Network Plan.